



AMBETRONICS
AN ISO 9001:2015 CERTIFIED COMPANY

Connect. Integrate. Deliver



**Warehouse
Temp. & RH
Monitoring**



HVAC



Cold Room



Gas Skid



**Chemical
Industry**



Power Plants



**Pharma & Food
Industry**



Smart City



**Agriculture Industry
soil moisture meter**

Connecting Things to Web

IoT
Smart Ecosystems | Developing the Future with Technology



Customer oriented



R & D Capability



Driving innovation



Shipping globally



SMART IOT SYSTEM

SIS4G485

- GSM connectivity (4G)
- MQTT (JSON)
- Dual SIM Slot for Network Redundancy
- Settable Alarms
- 32- Nodes MODBUS RTU
- SMS, E-mail & Voice Call alerts
- Isolated RS-485 Input & Output (optional)
- Network Failure Logging

SIS4D048

- GSM connectivity (4G)
- MQTT, HTTP, TCP-IP (JSON) Protocol
- Dual SIM Slot for Network Redundancy
- Universal Data Type
- Network Failure Logging
- 48- Nodes MODBUS RTU
- Isolated RS-485 Input

SIS4TRH

- GSM connectivity (4G)
- MQTT (JSON) Protocol
- SMS, E-mail & Voice Call alerts
- Dual SIM Slot for Network Redundancy
- Settable Alarms
- 2 inbuilt sensors Temp. & RH + 30 Nodes
- Isolated RS-485 Input
- Network Failure Logging

SIS4WTRH

- MQTT (JSON) Protocol
- GSM & WiFi connectivity
- Dual SIM Slot for Network Redundancy
- Universal Data Type
- Settable Alarms
- 2 inbuilt sensors Temp. & RH+46 Nodes
- Isolated RS-485 Input
- Network Failure Logging

SMART IOT SYSTEM

SISWD485

- MQTT (JSON) Protocol
- 48 Nodes MODBUS RTU
- WiFi connectivity
- Isolated RS-485 Input
- Settable Alarms
- Network Failure Logging

SISWDTRH

- MQTT (JSON) Protocol
- WiFi connectivity
- 2 inbuilt sensors Temp. & RH + 46 Nodes
- Isolated RS-485 Input
- Settable Alarms
- Network Failure Logging

SISLTRH

- Cloud connectivity via Gateway
- LoRa connectivity
- 2 inbuilt sensors Temp. & RH
- Settable Alarms

SMART IOT PORT

SIP4DRS

- MQTT, HTTP, TCP-IP (JSON) Protocol
- Dual SIM Slot for Network Redundancy
- SMS, E-mail & Voice call alerts
- 38 MODBUS slaves 8DI
- Isolated RS-485 Input and output
- Settable Alarms
- Universal Data Type
- Network Failure Logging

SMART IOT GATEWAY - WEATHERPROOF

SIG4LRN-WP

- 48 Compatible Nodes
- Dual 4G SIM slot for Network Redundancy
- I/P communication LoRa
- Isolated RS-485 output
- MQTT (JSON)
- 4-DPDT relays for control action
- Pendrive Data logging
- SMS & E-mail alert

SIG4GTU-WP

- 48 Compatible Nodes
- Dual 4G SIM slot for Network Redundancy
- Isolated RS-485 Input & Output
- MQTT (JSON)
- SMS & E-mail alert
- 4-DPDT relays for control action
- Pendrive Data logging

SIGWGTU-WP

- 48 Compatible Nodes
- MQTT (JSON)
- WiFi connectivity
- Isolated RS-485 Input & Output
- 4-DPDT relays for control action
- SMS & E-mail alert via cloud

SIG4UNI-WP

- 32 Compatible Nodes
- Dual 4G SIM slot for Network Redundancy
- Isolated RS-485 Input & Output
- MQTT (JSON)
- SMS and E-mail alert
- 4-DPDT relays for control action
- Pendrive Data logging
- Universal Data Type

SMART IOT GATEWAY - MS

SIG4LRN-MS

- 48 Compatible Nodes
- Isolated RS-485 output
- Dual 4G SIM slot for Network Redundancy
- I/P communication LoRa
- MQTT (JSON)
- 4-DPDT relays for control action
- SMS & E-mail alert
- Pendrive Data logging

SIG4GTU-MS

- 48 Compatible Nodes
- Dual 4G SIM slot for Network Redundancy
- Isolated RS-485 Input & Output
- MQTT (JSON)
- 4-DPDT relays for control action
- SMS & E-mail alert
- Pendrive Data logging

SIG2MCM-MS

- 70 Compatible Nodes
- Isolated RS-485 Input & Output
- 4-DPDT relays for control action
- Graphical L.C.D. Display
- Pendrive Data logging

SIG4UNI-MS

- 32 Compatible Nodes
- Dual 4G SIM slot for Network Redundancy
- Isolated RS-485 Input & Output
- MQTT (JSON)
- SMS & E-mail alert
- 4-DPDT relays for control action
- Universal Data Type
- Pendrive Data logging

SMART IOT GATEWAY - FLAMEPROOF

SIG4LRN-FLP

- 48 Compatible Nodes
- Dual 4G SIM slot for Network Redundancy
- MQTT (JSON)
- I/P communication LoRa
- Isolated RS-485 output
- 4-DPDT relays for control action
- SMS & E-mail alert
- Pendrive Data logging

SIG4GTU-FLP

- 48 Compatible Nodes
- Dual 4G SIM slot for Network Redundancy
- MQTT (JSON)
- Isolated RS-485 Input & Output
- 4-DPDT relays for control action
- SMS & E-mail alert
- Pendrive Data logging

SIG2MCM-FLP

- 70 Compatible Nodes
- Isolated RS-485 Input & Output
- 4-DPDT relays for control action
- Graphical L.C.D. Display
- Pendrive Data logging

SIG4UNI-FLP

- 32 Compatible Nodes
- Dual 4G SIM slot for Network Redundancy
- MQTT (JSON)
- Isolated RS-485 Input & Output
- 4-DPDT relays for control action
- SMS & E-mail alert
- Universal Data Type
- Pendrive Data logging

SMART IOT GATEWAY RECEIVER

SIG4RCV-WP

- 32-Node of WGD series
- Dual SIM slot for Network Redundancy
- MQTT (JSON)
- MODBUS RTU & TCP-IP Protocol
- 4 DPDT Relays
- Graphical L.C.D. Display
- Pendrive data logging

WIRELESS GAS DETECTORS FOR METHANE / TOXIC / COMBUSTIBLE

WGD4MSB-FLP

- Battery operated
- Upto 6+ months battery life
- SMS Facility to central unit and users
- Dual 4G SIM slot for Network Redundancy
- Graphical L.C.D. Display
- IP-66 Enclosure

WGD4MSP-FLP

- 7V to 24V DC (SMPS)
- Dual 4G SIM slot for Network Redundancy
- Inbuilt Hooter cum Flasher
- SMS Facility to control unit and users
- Graphical L.C.D. Display
- IP-66 Enclosure

WGD4MSS-FLP

- Solar operated
- Battery charging facility
- SMS Facility to control unit and users
- Dual 4G SIM slot for Network Redundancy
- Graphical L.C.D. Display
- IP-66 Enclosure

Smart IoT Gateway









Product Specifications

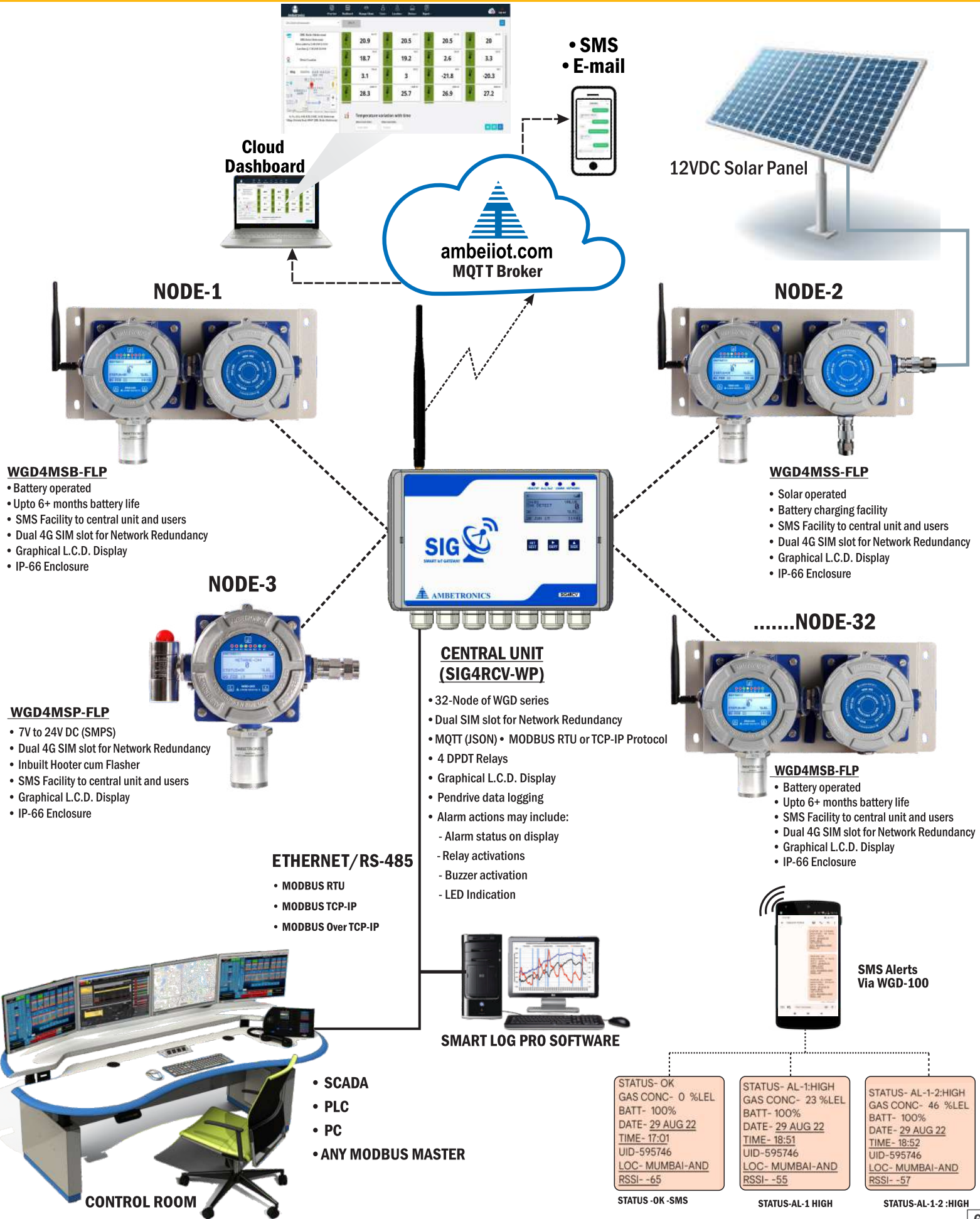


Model No.:	SIG4GTY- WP	SIGWGTY- WP	SIG2MCM - WP	SIG4LRN - WP	SIG4UNI - WP
No of Channels/Process Values	48	48	70	48	32
Connectivity	✓	✗	✗	✓	✓
i) GSM (4G) / GPRS	✓	✗	✗	✓	✓
ii) WiFi	✗	✓	✗	✓ (On Request)	✗
iii) LORA	✗	✗	✗	✓	✗
SIM Card Slots	02 Nos.	✗	✗	02 Nos.	02 Nos.
Input					
i) RS-485 MODBUS RTU	✓	✓	✓	✗	✓
Output					
i) RS-485 MODBUS RTU	✓	✓	✓	✓	✓
ii) MODBUS TCP/IP (Optional)	✓ (On Request)				
iii) Digital Output (Relay)	✓	✓	✓	✓	
Universal Data Types	✗	✗	✗	✗	✓
L.E.D. Indication	4	4	3	4	4
L.C.D. Display	✓ (128 mm x 64 mm)				
Alarm & Notification					
i) Email - 05 Email Address	✓	(from AmbelloT Cloud)	✗	✓	✓
ii) SMS - 10 Mobile Nos	✓		✗	✓	✓
Failsafe Memory	✓	✓	✗	✓	✓
Buzzer	✓	✓	✓	✓	✓
GPS (Optional)	✓	✗	✗	✓	✓
Data Interval	1 to 60 min	1 to 60 min	NA	1 to 60 min	1 to 60 min
Communication Protocol	MQTT (JSON)	MQTT (JSON)	NA	MQTT (JSON)	MQTT (JSON)
Device Configuration	AEPL-IIoT PC Software				
Inbuilt RTC	✓	✓	✓	✓	✓
Settable Alarms per Channel	2	2	2	2	2
Pendrive Interface	✓	✗	✓	✓	✓
Repeaters	✓	✓	✓	✓	✓
Supply Voltage 12V / 24V DC	✓	✓	✓	✓	✓
Environmental					
i) Operating Temperature	-10° to 50°C				
ii) Storage Temperature	-20° to 60°C				
Housing : Cabinet Material					
i) Polycarbonate, Grey colour (WP)	✓	✓	✓	✓	✓
ii) Cast Aluminium Alloy, LM-6 (FLP)	Available (PESO approved)	✗	Available (PESO approved)	Available (PESO approved)	Available (PESO approved)
iii) Metal Sheet Grey Colour (MS)	Available	✗	Available	Available	Available
iv) Protection Class : 1) IP-65 2) IP-66 3) IP-54	IP 65	IP 65	IP 65	IP 65	IP 65
Dimension : (W) x (H) x (D) in mm	271 x 170 x 60	271 x 170 x 60	271 x 170 x 60	271 x 170 x 60	271 x 170 x 60
Weight : in Grams	1 Kg Approx.				
Mounting	Wall Mounting				

Converters

Model No.:	ERS-485	ERS-232	RS-232 to RS-485	RS-485 TO USB	LRS-485
 <p>Product Specifications</p>					
Input	✓	✗	✓	✓ (as per application)	✓ (as per application)
i) RS-485 MODBUS RTU					
ii) RS-232	✗	✓	✓ (as per application)	✗	✗
iii) MODBUS TCP/IP	✓ (Configurable)	✓ (Configurable)	✗	✗	✗
iv) USB	✗	✗	✗	✓	✗
v) LoRa Wireless	✗	✗	✗	✗	✓ (as per application)
Output					
i) RS-485 MODBUS RTU	✓ (Configurable)	✗	✓ (as per application)	✓	✓ (as per application)
ii) RS-232	✗	✓ (Configurable)	✓	✗	✗
iii) MODBUS TCP/IP	✓	✓	✗	✗	✗
iv) USB	✗	✗	✗	✓ (as per application)	✗
v) LoRa Wireless	✗	✗	✗	✗	✓ (as per application)
L.E.D. Indication	2	2	2	2	2
BAUD Rate	2400bps to 460800bps				
Parity	None, Even, Odd				
Data Bits	8	8	8	8	8
Configuration	Inbuilt HTTP WEB Server		✗	✗	AEPL Software (Windows)
Interface Type					
Input	D+, D-, SH/RJ45	DB-9 pin (Female)/ RJ 45	D+, D-, SH/ RX, TX, GND	D+, D-, SH/ USB	D+, D-, SH/ Wireless
Output					
Supply Voltage					
9V to 24VDC Adaptor	✓	✗	✓	✓ (From PC)	✓
5 VDC Adaptor	✗	✓	✗		✗
Environmental					
i) Operating Temperature	-10°C to 50°C				
ii) Storage Temperature	-20°C to 60°C				
iii) Humidity	Less than 95% Non-Condensing				
Housing :					
Cabinet Material	✓	✓	✓	✓	✓
i) ABS Plastic					
Dimension : (W) x (H) x (D) in mm	59 x 101 x 23	41 x 78 x 24	59 x 101 x 23	40 x 70 x 20	59 x 130 x 23
Weight : in Grams	200 Gm Approx	100 Gm Approx	250 Gm Approx	100 Gm Approx	250 Gm Approx
Mounting	Din rail	NA	Din rail	NA	Din rail

Comprehensive Solution for Wireless Gas Detection & Control



WGD4MSB-FLP

- Battery operated
- Upto 6+ months battery life
- SMS Facility to central unit and users
- Dual 4G SIM slot for Network Redundancy
- Graphical L.C.D. Display
- IP-66 Enclosure

NODE-3

WGD4MSP-FLP

- 7V to 24V DC (SMPS)
- Dual 4G SIM slot for Network Redundancy
- Inbuilt Hooter cum Flasher
- SMS Facility to central unit and users
- Graphical L.C.D. Display
- IP-66 Enclosure

ETHERNET/RS-485

- MODBUS RTU
- MODBUS TCP-IP
- MODBUS Over TCP-IP

CENTRAL UNIT (SIG4RCV-WP)

- 32-Node of WGD series
- Dual SIM slot for Network Redundancy
- MQTT (JSON) • MODBUS RTU or TCP-IP Protocol
- 4 DPDT Relays
- Graphical L.C.D. Display
- Pendrive data logging
- Alarm actions may include:
 - Alarm status on display
 - Relay activations
 - Buzzer activation
 - LED Indication

SMART LOG PRO SOFTWARE

- SCADA
- PLC
- PC
- ANY MODBUS MASTER

CONTROL ROOM

- SMS
- E-mail

12VDC Solar Panel

NODE-2

WGD4MSS-FLP

- Solar operated
- Battery charging facility
- SMS Facility to central unit and users
- Dual 4G SIM slot for Network Redundancy
- Graphical L.C.D. Display
- IP-66 Enclosure

.....NODE-32

WGD4MSB-FLP

- Battery operated
- Upto 6+ months battery life
- SMS Facility to central unit and users
- Dual 4G SIM slot for Network Redundancy
- Graphical L.C.D. Display
- IP-66 Enclosure

SMS Alerts Via WGD-100

```
STATUS- OK
GAS CONC- 0 %LEL
BATT- 100%
DATE- 29 AUG 22
TIME- 17:01
UID-595746
LOC- MUMBAI-AND
RSSI- -65
```

STATUS -OK -SMS

```
STATUS- AL-1:HIGH
GAS CONC- 23 %LEL
BATT- 100%
DATE- 29 AUG 22
TIME- 18:51
UID-595746
LOC- MUMBAI-AND
RSSI- -55
```








STATUS-AL-1 HIGH

```
STATUS- AL-1-2:HIGH
GAS CONC- 46 %LEL
BATT- 100%
DATE- 29 AUG 22
TIME- 18:52
UID-595746
LOC- MUMBAI-AND
RSSI- -57
```

STATUS-AL-1-2 :HIGH

Smart IoT System

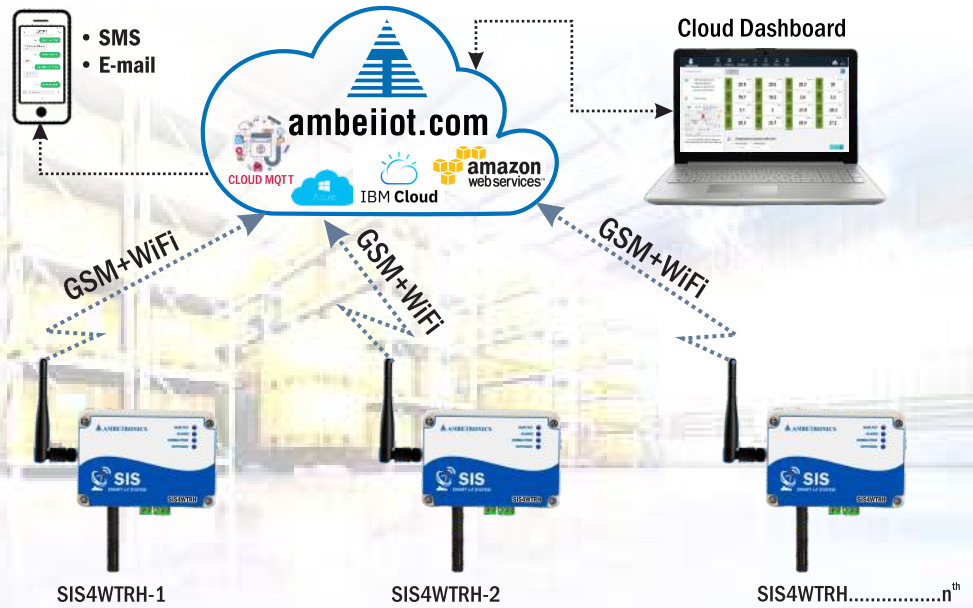
Smart IoT Port

Model No.:	SIS4G485	SIS4D048	SISWD485	SIS4TRH	SISWDTRH	SIP4DRS	
 Product Specifications							
No of Channels/Process Values	32	48	48	30 MODBUS slaves 2 (inbuilt Temp. & RH sensor)	46 MODBUS slaves	38 MODBUS slaves 8DI	
Connectivity							
i) GSM / GPRS	✓	✓	✗	✓	✗	✓	
ii) WiFi	✗	✗	✓	✗	✓	✓ (on request)	
iii) LORA	✗	✗	✗	✗	✗	✓ (on request)	
SIM Card Slots	02 NOS	02 NOS	✗	02 NOS	✗	02 NOS	
Input							
• RS-485 MODBUS RTU	✓	✓	✓	✓	✓	✓	
• Digital Input (Wet / Dry Contact)	✗	✗	✗	✗	✗	8DI	
• Analog Input	✗	✗	✗	✗	✗	✓ (on request)	
• Temperature & Humidity Sensor	✗	✗	✗	✓	✓	✓ (on request)	
Output							
• RS-485 MODBUS RTU	✓ (on request)	✓ (on request)	✗	✓ (on request)	✗	✓	
• MODBUS TCP/IP (Optional)	✓ (on request)	✓ (on request)	✗	✓ (on request)	✗	✓ (on request)	
• Digital Output (Relay)	✗	✗	✗	✗	✗	4DO	
• Analog Output	✗	✗	✗	✗	✗	✓	
Universal Data Types	✗	✓	✓	✗	✓	✓	
L.E.D. Indication	04 NOS	04 NOS	04 NOS	04 NOS	04 NOS	06 NOS	
Alarm & Notification		(from AmbelloT Cloud)			(from AmbelloT Cloud)		
i) Email - 05 Email Address	✓						✓
ii) SMS - 10 Mobile Nos	✓						✓
iii) Scheduled Email Reports	✓						✓
iv) Voice Call - 10 Mobile Nos	✓	✗	✗	✓	✗	✓	
Failsafe Memory	✓	✓	✓	✓	✓	✓	
Buzzer	✓	✓	✓	✓	✓	✓	
GPS (Optional)	✓	✓	✗	✓	✗	✓	
Data Interval	1 to 60 min						
Data Logging Records	50,000	15,000	15,000	50,000	15,000	50,000	
Event Logging Records	15,000	✗	✗	15,000	✗	15,000	
Communication Protocol	MQTT (JSON)	MQTT (JSON), HTTP, TCP-IP	MQTT (JSON)	MQTT (JSON)	MQTT (JSON)	MQTT (JSON), HTTP, TCP-IP	
Device Configuration	SMS Configuration/AEPL IIoT Software	AEPL IIoT Software	AEPL IIoT Software	SMS Configuration/AEPL IIoT Software	AEPL IIoT Software	SMS Configuration/AEPL IIoT Software	
Settable Alarms per Channel	2	✗	✗	2	✗	2	
Supply Voltage	9V to 24VDC Adaptor						
Environmental	• Operating Temp. : -10° to 50°C • Storage Temp. : -20° to 60°C • Humidity : Less than 95% Non-Condensing						
Housing : Cabinet Material	ABS Plastic						
Dimension : (W) x (H) x (D) in mm	150 x 90 x 55		120 x 90 x 55	150 x 176 x 55	120 x 176 x 55	200 x 150 x 85	
Weight : in Grams	270 Gm Approx.					700 Gm Approx.	
Mounting	Wall Mount						

Cold Chain Monitoring System

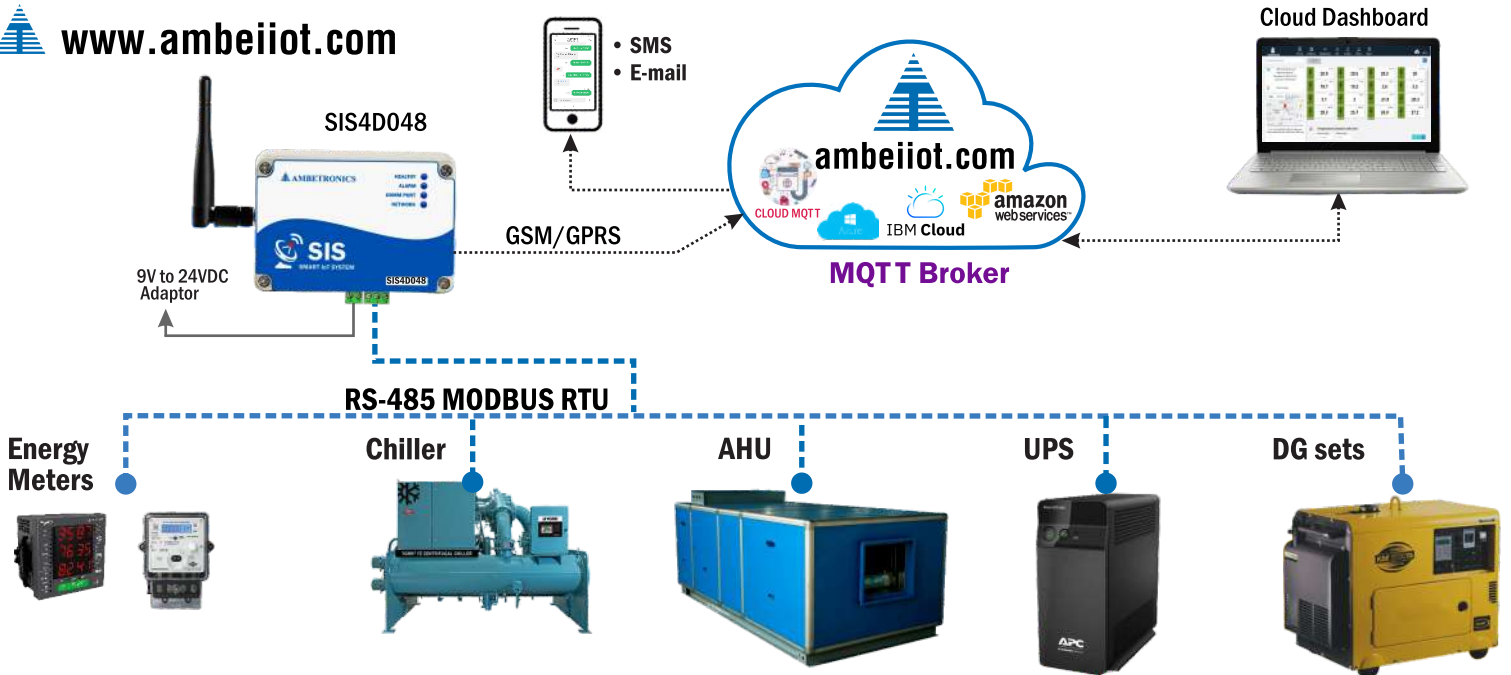
Applications :

- Ambient Room Temp. & RH Monitoring
- Cold Room
- Warehouse
- Chiller and Freezer
- HVAC
- Medical Industry
- Pharma and Food Industry
- Chemical Industry
- Agriculture Industry
- Power Plant

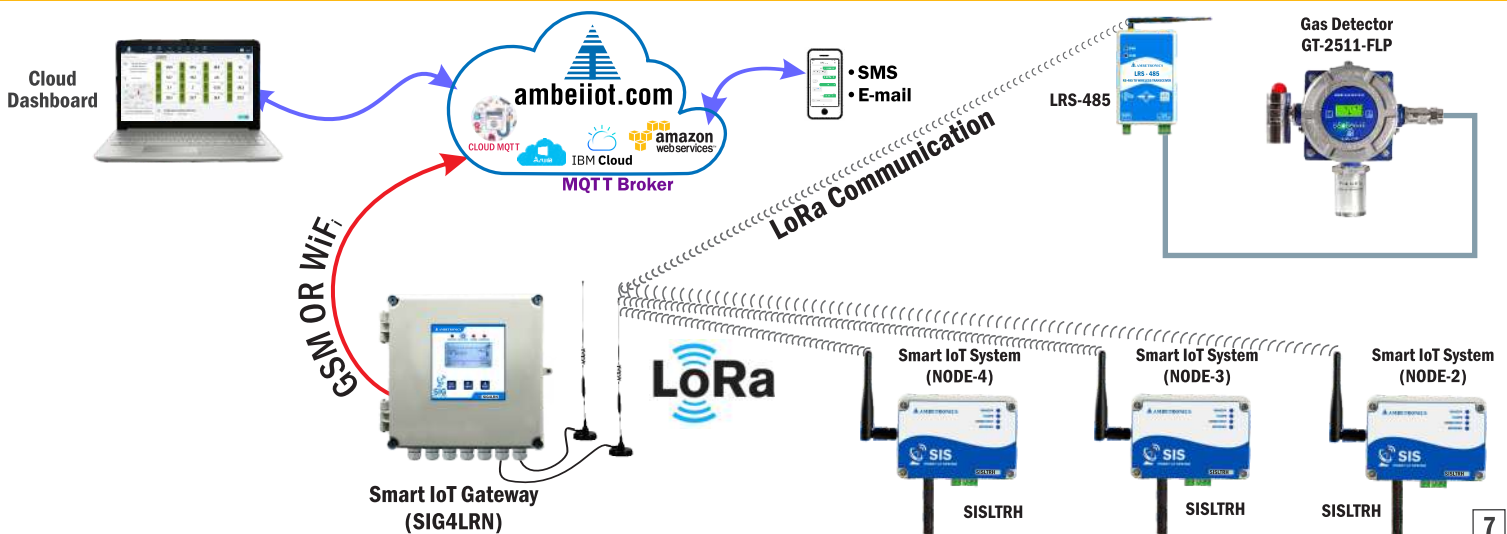


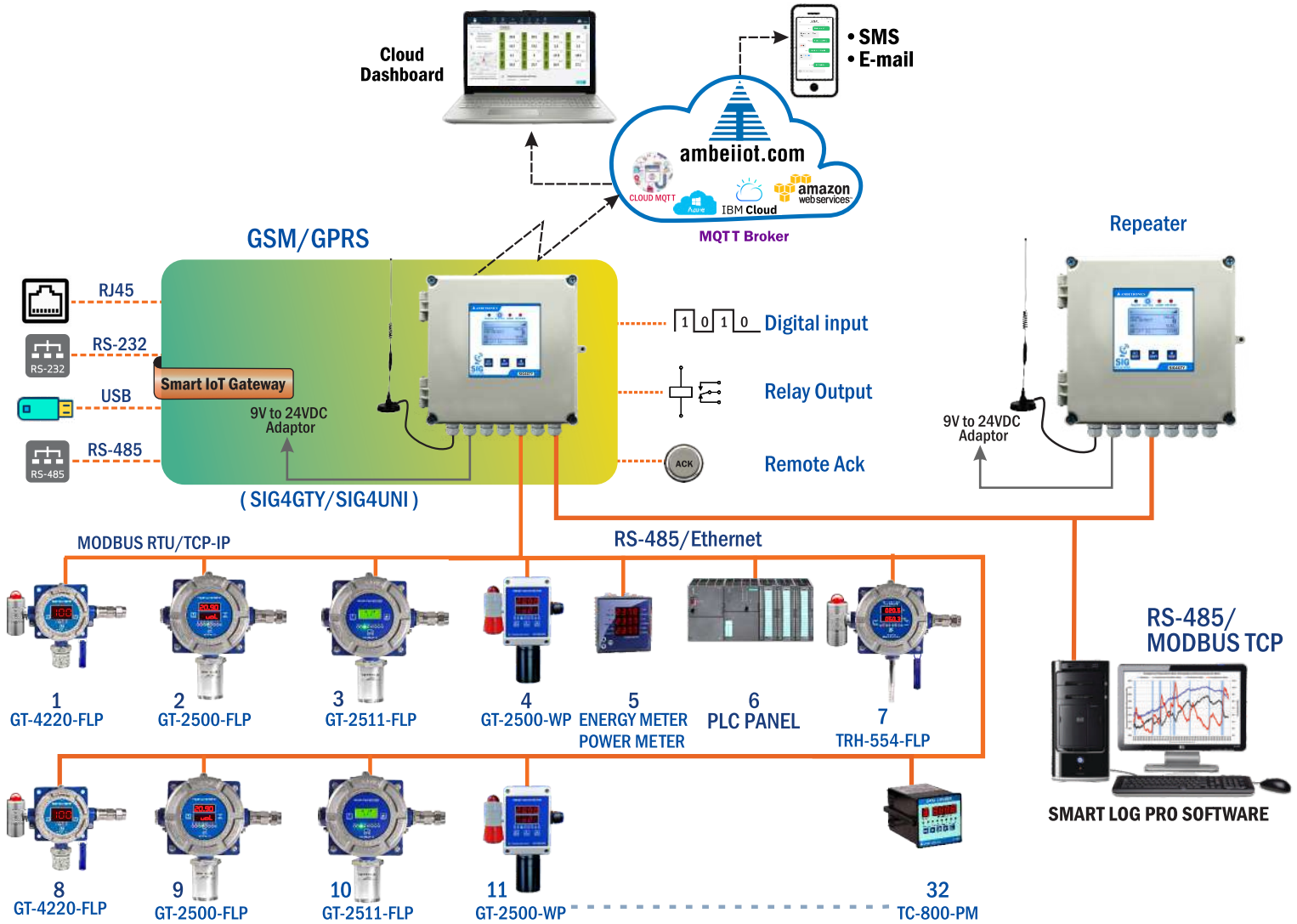
Energy Management System

www.ambeiiot.com



Wireless Temperature & Humidity Monitoring System





Portal Views

IIoT Cloud Platform.

- Enterprise wide integration
- Engaging data visualization
- Insightful analytics
- Powerful device management
- Secure & Reliable



Analytics & Reporting.

- Track opportunities & realize cost-saving
- Never miss a glitch in your metric
- Gets smarter with time
- Out-of-box, Self-service reporting

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